# IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF WISCONSIN

EDWARD D. ELIASON,

Plaintiff,

OPINION AND ORDER

v.

19-cv-829-wmc

SUPERIOR REFINING COMPANY LLC,

Defendant.

Plaintiff Edward Eliason claims he was injured after an explosion occurred at defendant Superior Refining Company, LLC's plant on April 26, 2018 ("the Explosion"), specifically alleging that he has since experienced altered mood, decreased cognition, memory loss, tinnitus, headaches, and hearing loss, among other symptoms. Eventually, Eliason was diagnosed with a blast-induced traumatic brain injury ("bTBI") which he alleges resulted from the accident.

Before the court are defendant's motion for summary judgment and a plethora of related motions concerning the admissibility of expert opinions and various affidavits.<sup>1</sup> Specifically, in addition to moving for summary judgment (dkt. #121), defendant Superior Refining Company, LLC ("Superior") moves to exclude the expert testimony of Dr. Ibolja Cernak (dkt. #113), David Gibson (dkt. #116) and Linda Schwieger (dkt. #119), as well as exclude the "untimely" expert opinions of Schwieger, Gibson, Cernak, and Dr. Catherine Johnson (dkt. #213). Additionally, plaintiff Edward Eliason moves to exclude the expert

<sup>&</sup>lt;sup>1</sup> In the time since these motions came under advisement, the parties have already filed two, additional motions. Now that the parties have further direction as to the court's approach to *Daubert* motions in the form of this opinion and order, they are encouraged to consider whether further motions are necessary.

testimony of Dr. Stephen Rundell (dkt. #126) and Dr. Lawrence Matta (dkt. #125). The court will take up each motion in turn, starting with the relevant, evidentiary motions before turning to defendant's motion for summary judgment. For the reasons set forth below, the court will deny the majority of the motions to strike, excluding those related to the expert opinions of Dr. Rundell and Linda Schwieger. The court will also deny defendant's motion for summary judgment.

#### **OPINION**

# I. Expert Testimony

Expert testimony is guided by Rule 702 of the Federal Rules of Evidence, which states that:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702.

The Supreme Court has summarized Rule 702 as allowing expert testimony that is both reliable and relevant. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 588 (1993). Regarding reliability, the Court explains that: "in order to qualify as 'scientific knowledge,' an inference or assertion" must be derived by the scientific method. Proposed testimony must be supported by appropriate validation." *Id.* at 590. As for relevance, the

Court further explains that "Rule 702's 'helpfulness' standard requires a valid scientific connection to the pertinent inquiry as a precondition to admissibility." *Id.* at 591.

In turn, the Seventh Circuit has boiled down the requirements of Rule 702 into a three-part test, which requires the district courts to evaluate: (1) the proffered expert's qualifications; (2) the reliability of the expert's methodology; and (3) the relevance of the expert's testimony." *Gopalratnam v. Hewlett-Packard Company*, 877 F.3d 771, 779 (7th Cir. 2017). Moreover, when confronted with specific scientific theories, the Seventh Circuit explains that "courts are to consider, among other things: (1) whether the proffered theory can be and has been tested; (2) whether the theory has been subjected to peer review; (3) whether the theory has been evaluated in light of potential rates of error; and (4) whether the theory has been accepted in the relevant scientific community." *Baugh v. Cuprum S.A. de C.V.*, 845 F.3d 838, 844 (7th Cir. 2017) (citations omitted). Accordingly, the court applies this guidance below with respect to the challenged experts' opinions.

# A. Stephen Rundell, Ph.D.

Defendant Superior offers Dr. Stephen Rundell as its primary expert, who opines that a blast with the strength of the Explosion could *not* have caused a bTBI like Mr. Eliason's. Plaintiff seeks to exclude Rundell's opinions based on his lack of qualifications to testify about blast-induced brain injuries. (Pl.'s Br. (dkt. #126) 13.) The court agrees with plaintiff that Rundell's lack of medical expertise and experience in explosive accidents and brain trauma, as well as his reliance on a small sample of papers of mixed quality, precludes his opining as to blast force thresholds before a bTBI could result both generally

and specifically as to plaintiff, but will allow him to express other opinions within his field of expertise.

Fundamentally, Rundell is a biomechanical engineer retained by Superior to analyze the interaction between the strength of the Explosion and its potential effects on the human body. (Def.'s Opp. (dkt. #193) 10.) While Rundell is by all accounts an accomplished engineer, he neither has any medical qualifications nor experience with bTBIs or their causes. This lack of particularized expertise *and* experience alone renders Rundell's opinions suspect in such a niche science as blast injuries, much less traumatic *brain* injuries from explosions. Finally, Rundell's findings and obvious lack of underlying scientific basis are, if anything, even more concerning.

More specifically, Rundell opines that a blast under 0.5 pounds per square inch ("PSI") could not cause a bTBI. In support, Rundell relies on three papers. (Rundell Rep. (dkt. #93) 14.) First, he states that "[b]ased on . . . Courtney & Courtney (2011), the side-on peak overpressure would need to be in the range of approximately 15-25 kPA (2-4 psi) for an injury to Mr. Eliason to potentially occur." (*Id.* at 13.) However, even a glance at the abstract of that paper *disavows* its ability to predict the likelihood or severity of an iTBI based on "a given exposure" to overpressure. *See* Courtney & Courtney, *Working Toward Exposure Thresholds for Blast-Induced Traumatic Brain Injury: Thoracic Acceleration Mechanisms*, NeuroImage (2011) (abstract of which states that, "[a]dditional data are needed before actual probabilities or severity of TBI for a given exposure can be described"); see also dkt. 126 ex. 6.

A thorough reading of the second paper on which Rundell relies similarly shows that the author admits, (a) "[c]urrently, the blast wave parameter(s) most important for predicting underlying injury are unknown," and (b) "[p]rimary bTBI mechanisms are a significant source of deliberation in the blast community." *See* Fievisohn et al., *Primary Blast Brain Injury Mechanisms: Current Knowledge, Limitations, and Future Directions*, J Biomech Eng., (2018) at 020806-9; *see also* dkt. 126 ex. 7.

Finally, the third paper, while the most supportive of Rundell's proposed opinion testimony, is a *student* dissertation that does not seem to have ever been published or even independently peer-reviewed.<sup>2</sup> *See* Rutter, *Pressure Versus Impulse Graph for Blast-Induced Traumatic Brain Injury and Correlation to Observable Blast Injuries*, Student Thesis (2019). Nor is there any indication as to the author's expertise, medical or otherwise. Additionally, the author acknowledges that "the diagnosis of bTBIs is difficult, due to few observable symptoms . . . . This research was conducted to determine if correlations between the occurrence of bTBIs and observable physical injuries exist after an explosive blast." *Id*. at 91.

Most telling, *none* of the papers on which Rundell purports to rely establish any *threshold* of PSI beneath which a bTBI cannot occur; thus, *none* of the papers support Rundell's opinion that Mr. Eliason's bTBI could not have been caused by the Explosion. Despite this, Rundell confidently states in his report that, "Mr. Eliason was not exposed to

<sup>&</sup>lt;sup>2</sup> The court need not take into account the affidavit of Dr. Catherine Johnson in making this decision. With Dr. Rundell's qualifications as to diagnosing bTBIs already in substantial doubt, his reliance on two contradictory papers and an unreviewed student work as evidence simply does *not* establish reliable methodology capable of assisting the jury as to specific causation.

a blast wave with sufficient magnitude and duration to cause a primary blast TBI." (Rundell Rep. (dkt. #93) 14.) Since Rundell's underlying premise that there is a necessary PSI threshold to cause an bTBI has not been tested, peer-reviewed or accepted by any scientific body or study, including those cited by Rundell, he will not be allowed to render this opinion, including other derivations on that theme, like those appearing as his formal, concluding opinions numbers 1 and 6. (Rundell Report (dkt. #93) at 23-24.)

Perhaps foreseeing this result, Superior also suggests in a footnote that Rundell is simply making "hypothetical statements about general causation." (Def.'s Opp'n (dkt #193) 9 & n7.) While uncertain what that even means in this context, the reality is that Rundell's opinion as to tolerance thresholds for humans before bTBIs can result goes straight to Mr. Eliason's personal, medical diagnosis following the explosion without sufficient expertise or scientific evidence. Nor can Rundell's engineering expertise make up for this lack of medical expertise or scientific support, especially given that he has *no* training in explosions, bTBIs, or medicine. Accordingly, Dr. Stephen Rundell's expert opinion testimony as to a tolerance threshold to prove causation will be excluded under Rule 702, both for purposes of ruling on defendant's motion for summary judgment and at trial.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Superior also filed a motion to strike plaintiff's motion to bar the testimony of Dr. Rundell. (Dkt. #159.) This motion to strike is based on a misinterpretation of the court's previous order (dkt. #83), which has since been resolved. (Order (dkt. #210) 4-5) ("the court's order only prohibited the use of these disputed reports at summary judgment . . . [t]hus, plaintiff['s] use of the disputed report in *Daubert* motion . . . did not violate this order.").) As such, that motion will also be denied.

#### B. Lawrence Matta, Ph.D.

Superior is also offering another engineer, Dr. Lawrence Matta, to opine as to calculations of forces from the Explosion by the time it reached Eliason. (Def.'s Opp'n (dkt. #194) 5.) While plaintiff has moved to exclude Matta for using an unreliable methodology for calculating blast forces as well (Pl.'s Mot. (dkt. #125)), the court finds that his methods are well within his field of expertise and sufficiently reliable to support the opinions he expressed in his report.

Since only the second prong of the Seventh Circuit's *Daubert* analysis is in dispute as to Matta's opinions, the court focuses on this question of reliability. Plaintiff argues that Matta erred in failing to use principles from a guide he described as "the bible" for pressure vessel failures at deposition. (*Id.* at 4.) Plaintiff further argues that this claimed failure to adhere to his own methodology, along with underlying factual assumptions (such as open terrain between the site of the Explosion and Eliason), render his opinions unreliable. (*Id.*)

Matta actually utilized four, different methods to calculate the energy of the blast wave at release, before using those numbers to estimate the strength of the blast wave as it reached Eliason. (Matta Rep. (dkt #92).) While plaintiff contends that other calculation methods would yield *more* accurate numbers, Matta has explained why he chose to use the Brode, isentropic, isothermal, and availability methods of calculations, as well as why he departed from the "bible" to which plaintiff refers. (Def.'s Opp'n (dkt #194) 5.) Regardless, "a key question to be answered in determining whether a theory or technique is scientific knowledge that will assist the trier of fact will be whether it can be (and has

been) tested," *Daubert*, 509 U.S. 579 at 593, and while the four methods used by Matta each differ slightly from one another, all *have* been tested, studied, and reviewed. *See* Bubbico & Mazzarotta, *Analysis and Comparison of Calculation Methods for Physical Explosions of Compressed Gasses*, AIDIC Conference Series, (2013). Indeed, all four methods used to calculate pressure, as well as Matta's further calculations, are generally accepted by the scientific community. *See* Daniel Crowl, *Understanding Explosions*, American Institute of Chemical Engineers, (2003) at App. B, 169-172. Moreover, acknowledging the complexity of measuring blast forces, Matta plausibly purports to have allowed for the possibility that different methods will lead to different results by incorporating all four calculation methods into his ultimate opinions. Certainly, there would appear to be room for a legitimate dispute as to whether Matta's method of calculation was the best or most accurate method, but that is a matter plaintiff can address in cross-examination or by presenting opposing evidence, including contrary opinion testimony.

As noted, plaintiff also challenges some of Matta's underlying assumptions in making his calculation, such as the complexity of the terrain. However, the Seventh Circuit is similarly permissive regarding the underlying assumptions upon which an expert's opinions are based, holding "[t]he fact that an expert's testimony contains some vulnerable assumptions does not make the testimony irrelevant or inadmissible." *Stollings v. Ryobi Technologies, Inc.*, 725 F.3d 753, 768 (7th Cir. 2013). While certain assumptions he made may be a weakness in Matta's testimony, "this arguable limitation can also be addressed through cross-examination." *Id*.

Accordingly, whether or not another method of calculation or different underlying assumptions would have rendered more accurate or reliable calculations is something that plaintiff can validly exploit before the jury, but it is not enough on this record to disqualify Matta's expert opinions. Any remaining doubts as to Matta's credibility or reliability of his opinion will, therefore, be the responsibility of the jury.

# C. Ibolja Cernak, M.D.

For his part, plaintiff offers Dr. Ibolja Cernak, a medical doctor with extensive experience with bTBIs, as his main expert regarding the extent to which his brain injuries were caused by the Explosion. (Pl.'s Opp'n (dkt. #201) 4-5.) Defendant similarly moved to exclude Dr. Cernak's opinion testimony under the second prong of the *Daubert* analysis regarding reliability, asserting that she failed to follow her own methodology or use an acceptable, alternative methodology. (Def.'s Mot. (dkt. #114) at 3-4.) However, this argument is wholly unpersuasive.

Essentially, defendant argues that Dr. Cernak described a "five-point" methodology for determining the severity of bTBIs in her previous writings, but then failed to use that same methodology in her expert report. (Def.'s Mot. (dkt. #114) 3.) However, this argument relies on the following, cherry-picked paragraph from just one paper authored by Dr. Cernak stating that:

The seminal works from 1950s to 1970s [6,8,10–13] posited that the severity of the injuries and the extent of damage caused by a blast wave depend on five main factors [14]: the peak of the initial positive-pressure wave (e.g., the overpressure ranges from 690 to 1724 kPa, e.g., 100–250 psi, is considered potentially lethal); the duration of overpressure; the density of the medium in which the explosion occurred (air or water); the

distance from the incident blast wave, namely, the intensity of the blast overpressure declines with the cubed root of the distance from the explosion (e.g., a person 3 m/10 ft from an explosion is subjected to nine-times more overpressure than a person 6 m or 20 ft away); and the degree of the blast wave's reflection, namely, in complex environments and confined spaces, the intensity of the blast wave can be augmented between two and nine-times due to reflection from surrounding objects or walls (e.g., victims positioned between blast and a building often suffer from injuries two- to three times more severe than a person in an open space). Although there are many discussions about other circumstances and elements that could influence the blast effects, the importance of the above mentioned factors remains irrefutable.

Ibolja Cernak, Understanding Blast-Induced Neurotrauma: How Far Have We Come? CNC42, (2017) at 2.

Read in context, even a layperson could see that the factors set forth are not meant to be Dr. Cernak's diagnostic criteria in a clinical setting; instead, the paragraph summarizes, at most, how academic works between 1950 and 1979 assess the extent of damage caused by blast wave depending on five factors. While Dr. Cernak appears to endorse the continued importance of these factors, along with "other circumstances and elements," nothing in this paragraph, or in the rest of that paper, suggests Dr. Cernak adopted these five factors as *her* diagnostic methodology for assessing the impacts of a blast on her patients' health generally or on bTBIs specifically. In fact, the notion that a calculation of forces alone would decide the effects of a blast (or a car accident) on an individual patient (with all their unique characteristics) over a careful, post-accident medical exam, patient history and eye witness accounts seems wholly unscientific, as well as inconsistent with the role of a jury in such cases. As such, it is fundamentally misleading

to claim this paragraph as a, much less the only, reliable method Dr. Cernak could or should have used in assessing the impacts of the Explosion on Eliason.

Defendant also argues that Dr. Cernak's actual methodology, involving a structured medical interview, is insufficiently reliable. (Def.'s Mot. (dkt. #114) 3.) To begin, defendant fails to acknowledge that a structed interview is an acceptable methodology used in the medical field to diagnose bTBIs, if not the leading one. See Miller et al., White Matter Abnormalities are Associated with Chronic Postconcussion Symptoms in Blast-Related Mild Traumatic Brain Injury, Hum Brain Mapp., (2016) at 227 (stating that "mTBI assessment was conducted using a guided in-depth structured interview, which is currently the gold standard for diagnosis"). Moreover, there is a ready explanation for the predominant role of this methodology, since much of the bTBI research uses military members as participants, as they are the most likely to experience such blasts. E.g., Sullivan et al., Functional Brain Alterations Associated With Cognitive Control in Blast-Related Mild Traumatic Brain Injury, J. Int. Neuropsych. Soc., (2018) at 4. When injury occurs during combat, there is no way for impacted soldiers to know the numerical values of the blast's strength. Thus, the bTBI must be diagnosed based on temporal relation to the explosion and the symptoms that result, just as Dr. Cernak did here. Id.; see also Miller et al., White Matter Abnormalities are Associated with Chronic Postconcussion Symptoms in Blast-Related Mild Traumatic Brain Injury, Hum Brain Mapp., (2016) at 227.

Regardless, Dr. Cernak has adequately explained why her methodology was utilized over some supposed "five-factor" test from the 1970s. (Pl.'s Opp'n (dkt. #201) 24-25.) Indeed, if the only valid way to diagnose a bTBI involved calculating the overpressure of

the explosion as refracted off the surrounding terrain, almost no one outside of participants in a controlled setting would be diagnosed with a bTBI. Again, "a key question" under *Daubert*, is whether a theory or technique "can be (and has been) tested." 509 U.S. 579 at 593. While the interview structure has been used repeatedly for diagnosis in the real world, defendant has pointed to no study using a "five-factor" test derived by defendant from a lone paragraph from Dr. Cernak's single reference as a method or technique to diagnose a bTBI, much less a medically accepted method for *precluding* the finding of a bTBI below some threshold force factor, even without patient specific evidence to the contrary. *Daubert* requires that the expert uses a scientifically valid methodology, not a strawman methodology never used by experts in the field.

Finally, defendant takes issue with Dr. Cernak's characterization of Eliason's ability to continue his job, arguing that she has no basis for such knowledge. (Def.'s Mot. (dkt. #114) 10.) However, as a medical doctor and expert in bTBIs, an opinion on Eliason's functional capacity is within her range of expertise; if anything, as discussed below, defendant itself argues opinions from a medical doctor are the *only* ones acceptable for Nurse Schweiger to rely upon in formulating plaintiff's life care plan going forward. To the extent that defendant would call Dr. Cernak's opinions as to plaintiff's abilities and needs into question, therefore, defendant is welcome to do so at trial during cross examination or through presentation of contrary evidence.

#### D. David S. Gibson

Next, defendant moves to disqualify the opinion testimony of a vocational economics expert as unreliable. Although this motion is not material to defendant's

pending motion for summary judgment, the court will take it up as well. Specifically, defendant objects to both David Gibson's Vocational Economic Rationale ("VER") method and certain assumptions that Gibson made in his calculations of plaintiff's likely damages. (Def.'s Mot. (dkt #117) 2.) As for the latter challenge, the court's ruling tracks that in rejecting plaintiff's challenge to Dr. Lawrence Matta: (1) an expert's testimony may contain vulnerable assumptions without making it "irrelevant or inadmissible," *Stollings*, 725 F.3d at 768, and (2) disqualification is also unnecessary given the availability of cross-examination to call into question those assumptions. *Id.* Moreover, whatever vulnerabilities may exist in certain of Gibson's underlying assumptions, he has explained the basis for those assumptions, which the jury will be free to accept or reject based on the evidence at trial. (Pl.'s Opp'n (dkt. #195) 6-9.) Thus, when faced with a similar challenge to his expert assumptions in the Northern District of Illinois, the court held that "Mr. Gibson's assumptions are not so implausible as to render his testimony inadmissible." *Rossi v. Groft*, No. 10 C 50240, 2013 WL 1632065, at \*2 (N.D. Ill. April 16, 2013).

As for defendant's challenge to Gibson's use of VER as unreliable, district courts have broad discretion in interpreting and assessing reliability, which must be case and fact specific. *Lapsley v. Xtek, Inc.*, 689 F.3d 802, 810 (7th Cir. 2012). In this case, VER uses data from the US Census Bureau and economic modeling in estimating a disability's impact on earnings. (Pl.'s Opp'n (dkt. #195) 16-18.) Gibson's use of VER data has been admitted on at least 68 occasions in the past five years, including districts within the Seventh Circuit. *see Rossi v. Groft*, No. 10 C 50240, 2013 WL 1632065 (N.D. Ill. Apr. 16, 2013) (finding Gibson's methodology acceptable); *Dahl v. Hofherr*, No. 3:14-CV-1734-MGG, 2016 WL

8668498 (N.D. Ind. Nov. 18, 2016) (same); *Barr v. United States*, No. 315-CV-01329-DRH-PMF, 2018 WL 4815413 (S.D. Ill. Oct. 4, 2018) (same); *but see Sturgis v. R & L Carriers, Inc.*, No. 3:19-CV-440 DRL-MGG, 2021 WL 3578746 (N.D. Ind. Aug. 13, 2021) (criticizing Gibson's methodology with regards to the specific facts of that case). Additionally, the Seventh Circuit has upheld reliance "on reasonable figures to estimate the impact of [a] permanent injury on [plaintiff's] earnings." *See Zhao v. United States*, 963 F.3d 692, 698 (7th Cir. 2020).

"The principle of *Daubert* is merely that if an expert witness is to offer an opinion based on science, it must be real science, not junk science." *Tuf Racing Products, Inc. v. Am. Suzuki Motor Corp.*, 223 F.3d 585, 591 (7th Cir. 2000). Given the acceptance of Gibson's methodology by the Seventh Circuit, as well as many other district courts, including his reliance on VER data, there would appear no good basis to exclude it as unreliable. Once again, defendant is free to cross examine Gibson on his methodology, assumptions and reliance on VER during trial. However, Gibson's opinions are reliable enough to survive a *Daubert* challenge.

### E. Linda K. Schwieger

Finally, as alluded to earlier, plaintiff also offers Linda Schwieger's opinion testimony as a nurse lifecare planner charged with calculating the future cost of his necessary care. Defendant has moved to exclude Schwieger's testimony on the basis that certain recommendations of medical treatment were not suggested by Eliason's doctors and exceed her qualifications as a nurse to prescribe. The court agrees and will limit Schwieger's opinion testimony to that supported by physician recommendations or medical records.

As an initial matter, life care plans have been upheld where the expert "relied upon standard life care planning techniques in devising [plaintiff]'s life care plan and developed the plan in collaboration with [plaintiff]'s physicians." *Taylor v. Union Pacific R. Co.*, No. 09-123, 2010 WL 3724287, at \*3 (S.D. III. Sept. 16, 2010); *see also Paine ex rel. Eilman v. Johnson*, No. 06 C 3173, 2010 WL 749861, at \*3 (N.D. III. Feb. 25, 2010). At the same time, testimony by nurse life care planners has generally been limited, as "treatment included in [the expert]'s life care plan that is not supported by a doctor's recommendation is not scientifically reliable." *Hale v. Gannon*, No. 1:11-cv-277, 2012 WL 3866864, at \*4 (S.D. Ind. Sept. 5, 2012).

Because Schweiger is a nurse, she does not appear qualified to reach her *own* medical diagnoses, at least without the specialized training of a nurse practitioner, and even then, only to the extent of her state licensure. *See id.* (holding that a nurse life care planner "is not qualified to prescribe medical treatment"). With this limit, however, a nurse's life care plan is otherwise deemed reliable to the extent that it draws from the patient's medical records and recommendations of physicians. While defendant argues that any opinion by a nurse life care planner must specifically be based on a recommendation by the plaintiff's *treating* physicians, the Central District of Illinois case cited by defendant for that proposition does not support it. In *Hopey v. Spear*, 2016 WL 9665159 (C.D. Ill. Ap. 18, 2016), the court addressed similar life care opinion testimony by Linda Schwieger, holding that:

Schweiger made a series of assumptions regarding frequency and duration of treatment that are not supported by the medical records or prescribed by the doctors, and those items based on those assumptions should be excluded; Schweiger also included a number of items in the Plan that are not supported by the medical records or doctors and those should also be excluded

*Id.* at \*3. However, while critical of Schwieger's testimony if unsupported by the medical record or doctors, the *Hopey* court did *not* conclude that a nurse's life care plan must be supported by *treating* physicians. (*Id.*)

Based on this guidance, the following sections of Schwieger's report do not have sufficient support from a doctor recommendation or plaintiff's medical record, and thus, are excluded: 1) adaptive equipment; 2) heavy-duty housekeeping; 3) lawn and acreage care; 4) snow removal; 5) handyman; 6) bookkeeping services; 7) care supports; 8) and transportation.<sup>4</sup>

#### II. Miscellaneous Motions

The court must also address a few, miscellaneous motions that largely concerning the parties proffer of affidavits and an expert's deposition errata sheets at summary judgment.

## A. Dr. Ibolja Cernak Errata

Under Federal Rule of Civil Procedure 30(e), deponents are allowed to make changes to the "form or substance" of their deposition transcript. Fed. R. Civ. Proc. 30.

<sup>&</sup>lt;sup>4</sup> The court notes that Schwieger *did* cite to a doctor (namely, Eliason's psychologist) in the care supports section of her report, noting that he is "[s]upportive of outside team supports in addition to [plaintiff's wife] if it is needed." (Schwieger Rept. (dkt. #98) 44.) However, without more, this statement does not support Schwieger's specific recommendations of a nurse case manager, choreworker, home aide, and possible stay in a dementia unit.

This broad language has been read as generally permissive in its application. For example, while the Seventh Circuit has held that "a change of substance which actually contradicts the transcript is impermissible," other changes of substance are allowed. *Thorn v. Sundstrand Aerospace Corp.*, 207 F.3d 383, 389 (7th Cir. 2000).<sup>5</sup> As an additional protection against bad behavior, "the rule requires that the original transcript be retained . . . so that the trier of fact can evaluate the honesty of the alteration." *Id*.

Nevertheless, defendant moves to strike wide portions of Dr. Ibolja Cernak's errata, alleging that the changes go so far as to contradict her own previous testimony. (Def.'s Mot. (dkt. 111).) After reviewing the errata changes, the court disagrees. For many of Dr. Cernak's changes, she added clarification and context, which is expressly allowed under Rule 30 and, if anything, constitute supplementation and nuance that Rule 26 encourages in advance of trial to avoid unfair surprise and prejudice. While two changes on the errata sheet change an answer from "yes" to "no," both are minor questions asking Dr. Ibolja whether she reviewed a specific doctor's work and were plausibly the result of a lapse of memory, although defendant is obviously free to ask for an explanation before trial. (Def.'s Mot., App'x A (dkt. #111).)

The question that defendant takes the most issue with regards an apparent admission by Dr. Cernak about low explosion pressures. (*Id.* at 21). Superior argues that

<sup>&</sup>lt;sup>5</sup> Disappointingly, defendant's counsel cites only to another phrase from that same opinion, which they then paraphrase as "only permit[ing] errata that correct[] . . . an error in transcription." (Dkt. #111) p. 2.) At best, this was a highwater mark that a few district court's briefly embraced, but was never a holding by the Seventh Circuit in *Thorn* or otherwise. This is not the only example of counsel playing fast and loose with the actual facts and law in its briefing, and while the court will countenance the occasional mistake, even if bordering on sharp practice, it expects far better going forward.

Dr. Cernak now states that "there is no completely 'safe' level of blast exposure," which Superior argues is an attempt to retract an admission at her deposition that there are no studies showing bTBI injuries under a PSI of 0.5. (*Id.*) Instead, it appears the parties continue to be talking past each other based on very different theories of the case, and thus, misunderstand the import of Dr. Cernak's actual answers to the questions posed at her deposition. That there are no formally documented study or cases of brain injury being diagnosed beneath 0.5 PSI is not necessarily inconsistent with her belief that there is no safe exposure level, as the absence of evidence is not necessarily evidence of absence, at least until at minimum, a concerted effort is made by the scientific community to look for such evidence, or the medical community adopts an actual threshold for such a diagnosis. Understandably, until then, Dr. Cernak's position appears to be consistent with that of the larger medical community. Again, this, too, is hardly surprising, given the vagaries of such injuries depending upon the specifics of the blast and the individual patient's health.

Thus, while Dr. Cernak's original admission is arguably important to defendant's theory, her correction is hardly so egregious a change as to "actually contradict the transcript." *Thorn*, 207 F.3d 383 at 389. To the extent Superior believes these changes undermine Dr. Cernak's credibility, its counsel may attempt to use the original transcript at trial to aid the trier of fact, provided they do so within the confines of proper refresh or impeachment under the Federal Rules of Evidence. As with several of the other motions before it, to avoid any claim of prejudice or surprise, the court will not rely on any of Cernak's changes to her deposition testimony as a basis for finding a genuine dispute of

material fact at summary judgment. As such, striking the errata is both unnecessary and unjustified.

# B. Cernak, Gibson and Schwieger Affidavits

Defendant has also moved to strike three affidavits submitted by plaintiff as untimely, unjustified and prejudicial. (Def.'s Mot. (dkt #214) 1.) These affidavits are from Dr. Cernak, David Gibson, and Linda Schwieger, all of whom were named by plaintiff as expert witnesses in the case. (*See* dkt. ## 203, 196, 199.) The court denies the motion to strike these three affidavits for two reasons: (1) Rule 26(e)(2) does not apply to these affidavits; and (2) even if Rule 26(e)(2) were applicable, any arguable failure to disclose their substance sooner is substantially justified and harmless.

Under Rule 26(e)(2), parties may supplement expert reports if "disclosed by the time the party's pretrial disclosures under Rule 26(a)(3) are due." Fed. R. Civ. Pro. 26. However, defendant argues that these three expert affidavits go beyond simply "supplementing" information, and instead add new information that could and should have been disclosed in their original expert reports. (Def.'s Mot. (dkt #214) 1-3.) Thus, again generally relying on the sanctions set forth under Rule 37(c)(1), defendant argues that having failed to provide information timely, plaintiff ought not be "allowed to use that information or witness to supply evidence on a motion, at a hearing, or at a trial, unless the failure was substantially justified or is harmless." Fed. R. Civ. Proc. 37. In particular, defendant's argument appears to be that these experts had failed to provide the information in the affidavits previously, making it improper to disclose now. Upon review, that

argument is not persuasive. To the contrary, none of the affidavits substantially changed or altered each affiant's previous expert reports.

For example, Nurse Schwieger's affidavit simply asserts that she complied with life care planning standards and attaches her curriculum vitae, which neither adds to nor changes her expert testimony. (Schwieger Aff. (dkt. 199).) Additionally, the Gibson affidavit sets forth his curriculum vitae and further explains some of his assumptions criticized in defendant's *Daubert* motion. (Gibson Aff. (dkt. #196).) Experts need not cover "any and every objection or criticism of which an opposing party might conceivably complain" in their reports, and the clarifications made by Gibson in his affidavit also do not change the substance of his testimony. *Allgood v. General Motors Corp.*, No. 102CV1077, 2006 WL 2669337, at \*5 (S.D. Ind. Sept. 18, 2006). Finally, Dr. Cernak's affidavit is generally a repeat of points made in her supplemental expert report. (Cernak Aff. (dkt. #203).) Thus, nothing in this disclosure changes the substance of her previous reports either. While these three affidavits were largely, if not entirely, unnecessary, the court will not strike them simply for being extraneous.

Moreover, even if deemed somehow untimely, the court finds all three affidavits meet the burden of being justified or, at most, harmless under Rule 37. Given that none of the affidavits substantially alter previous testimony in a way that would be prejudicial to defendant, therefore, granting defendant's motion to strike the Cernak, Gibson, and Schwieger affidavits would still be improper. For all these reasons, the court will deny defendant's motion.

#### C. Dr. Catherine Johnson Affidavit

Finally, with respect to the challenge to an affidavit submitted by Dr. Catherine Johnson, it was only provided for use with respect to the parties' *Daubert* motions. The court having now disposed of those motions without reliance on the Johnson affidavit, and it having no application to defendant's motion for summary judgment, the motion to strike will be denied as moot.

# III. Summary Judgment

With these preliminary, evidentiary skirmishes resolved, the court turns to defendant's motion for summary judgment. As a general matter, summary judgment must be granted against a party who fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial. *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). If there is any genuine issue as to any material fact, the court cannot grant summary judgment. *Id.* A dispute is genuine "if the evidence is such that a reasonable jury could return a verdict for the non-moving party." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986) (citation omitted). Finally, "[t]he evidence of the non-movant is to be believed, and all justifiable inferences are to be drawn in his favor." *Id.* at 255.

Here, the material facts are not in dispute at summary judgment, save the cause and extent of plaintiff's injuries.<sup>6</sup> Eliason's alleged injuries arose from the Explosion at

<sup>&</sup>lt;sup>6</sup> Typically, the court would set forth a more thorough explanation of the undisputed facts in ruling on a motion for summary judgment, but given the limited nature of defendant's motion, such a detailed summary is unnecessary.

defendant's refinery in Superior, Wisconsin, on April 26, 2018. (Def.'s Reply to Def.'s PFOFs (dkt. #241) ¶ 1-2.) At the time of the explosion, Eliason was working at a nearby property some 1,650 feet away (roughly 4½ football fields, including end zones). (Id. at ¶ 2.) At the time, Eliason was working as a Master electrician. (Def.'s Resp. to Pl.'s PFOFs (dkt. #244) ¶ 3.) Eliason later claimed to be experiencing vision loss, hearing loss, brain injury, and other ill effects as a result of the blast, which Superior disputes. (Compl. (dkt. #1) 13.) Accordingly, without disputing that sufficient evidence exists to find Superior liable for the Explosion itself and resulting damages, Superior hangs its hat at summary judgment on the assertion that Eliason has failed to offer sufficient evidence for a reasonable jury to find his blast-induced traumatic brain injury ("bTBI") was either generally or specifically caused by the Explosion. (Def.'s Mot. (dkt. #122).)

Certainly, without proof of causation, Eliason would have failed to "establish the existence of an element essential" to its claims against Superior, *Celotex*, 477 U.S. at 323, but this argument relies on Superior's assertion that absent definitive proof that a blast with pressure of 0.5 PSI or less (at least by the time it reached the alleged victim) has caused a bTBI, plaintiff cannot meet his burden of proof as to general and specific causation. (Def.'s Mot. (dkt. #122) 2.) However, this argument is essentially nothing but a strawman. As set forth above, Eliason has provided admissible expert opinion testimony by a highly qualified medical doctor disputing this very assertion and opining that there is reliable evidence that *Eliason's* symptoms are consistent with bTBI. This, along with substantial other circumstantial evidence, including testimony that Eliason in the main

lacked these symptoms before the Explosion, is enough to create a genuine issue of material fact as to causation that a lay jury must resolve at trial.

To begin, the concept of general causation as outlined by Superior is largely foreign to Wisconsin tort law, as well as a bad fit in this case. Even assuming that general causation must always be proven, Superior's argument depends almost exclusively on a specific subset of cases in which general causation is so pivotal that expert testimony needs to be provided. While there are a few outliers, those cases are by and large in the area of toxic torts. *E.g., C.W. ex rel. Wood v. Textron*, 807 F.3d 827 (7th Cir. 2015). With respect to toxic torts, a central question is almost always whether a specific type of injury could have been caused by a particular toxin:

While the plaintiff is obligated to prove some degree of negligence, the question remains whether expert testimony is required in that process. Expert testimony is unnecessary in cases where a layperson can understand what caused the injury. So, for example, when a plaintiff suffers from a broken leg or a gash when hit by a vehicle, he doesn't need to produce expert testimony. But when there is no obvious origin to an injury and it has "multiple potential etiologies, expert testimony is necessary to establish causation."

Myers v. Ill. Central R. Co., 629 F.3d 639, 643 (7th Cir. 2010) (quoting Wills v. Amerada Hess Corp., 379 F.3d 32, 46–47 (2d Cir.2004)) (other citations omitted).

For most cases, including this one, general causation is obvious: there was a car accident, an explosion or other singular, catastrophic event. Thus, the question is only whether the event sufficiently touched an individual plaintiff. In contrast, in the toxic tort context, proof of general causation is important because the cases are often novel and possible causes of any injuries are diffuse as to time, place and manner, raising public policy

concerns that are simply not present here. Moreover, in the present case, there is already a *substantial* body of research regarding bTBIs from many scientific sources, which establishes general causation between explosions and bTBIs. Accordingly, the only real question is whether the Explosion caused *Eliason's* diagnosed bTBI, which is a question of specific causation, not general.

In support of the idea that the explosion could not have caused Eliason's injury, defendant principally theorizes that there is actually a "pressure threshold" requiring an individual blast exposure of more than 0.5 PSI before it could cause bTBIs. (Def.'s Mot. (dkt. #122) 2.) While this theory could go to the question of the causation of Eliason's injury, it is certainly not sufficient to grant summary judgment. Said another way, to the extent defendant can show an absence of current evidence of TBIs caused under low pressure, this does not foreclose a jury from finding that Eliason suffered from a bTBI, provided other evidence supports that finding. As previously discussed, PSI is rarely even ascertainable in clinical studies of people diagnosed with bTBIs, since many if not most patients encounter explosions in an uncontrolled setting, including theaters of war. See White Matter Abnormalities are Associated with Chronic Postconcussion Symptoms in Blast-Related Mild Traumatic Brain Injury, Miller, et al. (Hum Brain Mapp. 2016) at pg. 226 (studying bTBIs by asking potentially exposed service members, "for an in-depth description of the index event including their memory for events preceding, during, and subsequent to the blast"). Instead, for most bTBI patients, all they know is that there was an explosion, and sometime after they started having symptoms consistent with a bTBI. As such, the science

around bTBIs relies heavily on self-reported symptoms and first-hand accounts, rather than an accepted calculation of blast pressure. *Id.* 

Further, to the extent that studies have attempted to provide a blast force or pressure threshold below which a bTBI will not occur, even the few papers relied upon by defendant's proffered expert state that there is not yet such a definitive threshold. See Courtney & Courtney, Working Toward Exposure Thresholds for Blast-Induced Traumatic Brain *Injury: Thoracic Acceleration Mechanisms*, NeuroImage (2011) (abstract of which states that, "[a]dditional data are needed before actual probabilities or severity of TBI for a given exposure can be described"). Thus, defendant is essentially arguing that, before Eliason can establish causation in this case, he must present scientific evidence that even the top experts in the field of bTBI do not possess. Wisconsin tort law does not require Eliason to make such a novel scientific discovery before he can clear the causation hurdle of summary judgment in this case. *Id.* at 3. Instead, he must show (1) cause in fact and (2) publicpolicy considerations. Miller v. Wal-Mart Stores Inc., 219 Wis. 2d 250, 260-62, 580 N.W.2d 233 (1998); Zarnstoff v. Neenah Creek Custom Trucking, 330 Wis. 2d 174, 194 & n.6, 792 N.W.2d 594 (Ct. App. 2010). Wisely, defendant does not even suggest a publicpolicy argument for not holding it responsible for the impact of the Explosion on persons and property. As for proof of cause in fact, plaintiff must prove that the Explosion was "a substantial factor in producing" his bTBI. Zarnstoff, 330 Wis. 2d at 194 & n.6. As such, expert testimony that a bTBI can occur under a PSI of 0.5 is not necessary for plaintiff to establish causation, provided both his treating physicians and medical expert opine that he is actually suffering from the symptoms of a bTBI brought on by the explosion.

Even if defendant had a point where the evidence *only* consisted of plaintiff's medical diagnosis of a bTBI after the Explosion, plaintiff also offers other admissible, temporal evidence sufficient to put causation into genuine dispute, including lay testimony as to the onset of plaintiff's symptoms after the Explosion, as well as experts testifying that he not only does have a bTBI, but that his symptoms came on rapidly after the Explosion. Again, this evidence is enough for a reasonable jury to find Wisconsin's requirement for cause in fact has been met: that defendant's alleged negligence in causing the Explosion was "a substantial factor in producing [his] injuries." *Baumeister v. Automated Prod., Inc.*, 2004 WI 148, ¶ 24, 277 Wis. 2d 21, 690 N.W.2d 1. Specifically, as already discussed, plaintiff has proffered the opinions of two medical experts in Drs. Brian Greenwald and Ibolja Cernak connecting Eliason's symptoms to the Explosion.

Finally, to the extent that defendant contends Eliason's medical problems predated the explosion, plaintiff has advanced sufficient evidence to put that contention into dispute as well. For example, before the Explosion at issue in this case, it appears Eliason "neither reported . . . nor been assessed by [his primary care provider], with any ringing in his ears, headaches, fatigue or slowed cognitive processing." (Pl.'s PFOFs (dkt. #206) ¶ 13.) In addition, plaintiff, as well as others close to him, will testify to similar changes after the

<sup>&</sup>lt;sup>7</sup> Eliason has also offered Drs. Jeri Morris and Trevor Snyder as medical experts. However, as a penalty for their late disclosure, the court ordered that this testimony not be considered at summary judgment. (Order (dkt. #210).) As such, the court has not and will not consider this testimony until trial. In addition, defendant filed this morning a motion to supplement its summary judgment argument based on a convoluted estoppel argument regarding a lack of reported OSHA complaints. (dkt. #338.) While defendant will not be precluded from addressing the issue in motions in limine, this argument is simply too little, too late to be cidered at summary judgment, and will be denied as moot.

Explosion. Even defendant's proof of plaintiff's exposure to an earlier blast and the presence of evidence of bTBI in his medical records before the Explosion is a double-edged sword, since it opens up the proverbial "eggshell-skull" causation argument recognized under Wisconsin common law for more than a century, sometimes referred to as "taking your victim as you found them." *Williamson v. Handy Button Mach. Co.*, 817 F.2d 1290, 1294 (7th Cir. 1987); *Anderson v. Milwaukee Ins.*, 161 Wis. 2d 766, 468 N.W.2d 766 (Ct. App. 1991); *Vosberg v. Putney*, 86 Wis. 278, 56 N.W. 480 (1893).

At bottom, plaintiff is making a fundamentally different causation argument than defendant: bTBIs are best diagnosed by a medical doctor based on a specific set of symptoms after exposure to a blast, rendering the actual strength of the blast, while relevant, not the primary diagnostic method used by the scientific community. Plaintiff's combination of medical records, subjective reports of lay persons and expert testimony therefore creates a genuine dispute as to the material facts surrounding the question of cause in fact of Eliason's injuries, including in particular whether the Explosion was a substantial factor in producing Eliason's diagnosed bTBI. Accordingly, whether the explosion was a cause in fact is now a question for the jury.<sup>8</sup>

<sup>&</sup>lt;sup>8</sup> As to the relevance of plaintiff's alternative argument of causation that the Explosion is responsible for symptoms consistent with PTSD, a door apparently opened by one of defendant's experts, the court takes no position until briefed as a motion *in limine*.

#### **ORDER**

#### IT IS ORDERED that:

- 1) Defendant Superior Refining Company, LLC's motion for summary judgment (dkt. #121) is DENIED.
- 2) Defendant Superior Refining Company, LLC's motion to exclude the expert testimony of Dr. Ibolja Cernak (dkt. #113) is DENIED.
- 3) Defendant Superior Refining Company, LLC's motion to exclude the expert testimony of David Gibson (dkt. #116) is DENIED.
- 4) Defendant Superior Refining Company, LLC's motion to exclude the expert testimony of Linda Schwieger (dkt. #119) is GRANTED IN PART and DENIED IN PART as set forth above.
- 5) Defendant Superior Refining Company, LLC's motion to exclude untimely opinions (dkt. #213) is DENIED.
- 6) Defendant Superior Refining Company, LLC's motion for leave to file a supplemental motion for summary judgment (dkt. #338) is DENIED AS MOOT.
- 7) Plaintiff Edward Eliason's motion to exclude the expert testimony of Dr. Stephen Rundell (dkt. #126) is GRANTED IN PART and DENIED IN PART as set forth above, while defendant's motion to strike plaintiff's motion (dkt. #159) is DENIED.
- 8) Plaintiff Edward Eliason's motion to exclude the expert testimony of Dr. Lawrence Matta (dkt. #125) is DENIED.

BY THE COURT:

Entered this 15th day of October, 2021.

/s/	
WILLIAM M. CONLEY District Judge	-